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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/532,358

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Alagarsamy Sundararajan

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EXAMINER

BEACH, THOMAS A

ART UNIT

PAPER NUMBER

3671

MAIL DATE

DELIVERY MODE

09/21/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/532,358

Applicant(s)

SUNDARARAJAN ET AL.

Examiner

Thomas A. Beach

Art Unit

3671

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 13-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                 | 5) <input type="checkbox"/> Notice of Informal Patent Application                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims are rejected under 35 U.S.C. 103(a) as being unpatentable over Edwards 6,053,252 . Edwards shows a lightweight subsea intervention package for use in servicing a subsea well 20, said subsea well having at least one of a vertical Christmas tree 12 or a horizontal Christmas tree, said subsea intervention package being operable for containing said subsea well while using at least one of tubing, coiled tubing, or wireline during said servicing of said subsea wells, said subsea intervention package comprising: a lower package attachable to said subsea well regardless of whether said subsea well comprises said vertical Christmas tree or said horizontal Christmas tree, said lower package comprising at least two hydraulically actuated valves (fig 3-4) neither of which are B.O.P.'s, at least one of said at least two hydraulically actuated valves being operable for cutting said tubing, coiled tubing, or wireline and then closing to form a seal for sealing said subsea well, said lower package defining a bore through said at least two hydraulically actuated valves (fig 3); a disconnect mechanism comprising a first portion and a second portion, said t first portion of said disconnect mechanism

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being secured to said lower package, said first portion and said second portion of said disconnect mechanism being selectively separable; an emergency disconnect package EDP mountable to said second portion of said disconnect mechanism, said disconnect mechanism comprising at least one hydraulically actuated valve, said emergency disconnect package defining a bore through said at least one hydraulically actuated valve which is greater than six and one-eighth inches, said lightweight subsea intervention package being light enough and defining a footprint small enough such that said lightweight subsea intervention package can be installed on said subsea well utilizing a vessel with a handling capacity less than that of a semi-submersible platform. Edwards does not disclose the two hydraulically actuated valves which is greater than six and one-eighth inches or valve which is greater than six and one-eighth inches; however, it would have been an obvious matter of design choice to modify the Edwards to include the ranges of since applicant has not disclosed that these ranges solve any particular problem or purpose and it appears other similar ranges would work equally well. Furthermore, routine experimentation would lead one of ordinary skill in the art to these ranges.

As concerns claims 2 and 8, Edwards shows at least two hydraulically actuated valves and said at least one hydraulically actuated valve define a bore there through (fig 3) which is greater than seven and one-eighth inches. It would have been an obvious matter of design choice to modify the Edwards to include the ranges since routine experimentation would lead one of ordinary skill in the art to these ranges.

As concerns claim 3, Edwards does not disclose lower package weighs between ten and thirty tons, and said emergency disconnect package weighs between five and twenty tons. It would have been an obvious matter of design choice to modify the Edwards to include the ranges since routine experimentation would lead one of ordinary skill in the art to these ranges.

As concerns claim 4, Edwards shows emergency disconnect package EDP is securable to a riser and wherein said emergency disconnect package is operable to seal a lower end of said riser if said disconnect mechanism is activated to separate said emergency disconnect package from said lower package (fig 1).

As concerns claim 5, Edwards shows a first of said at least two hydraulically actuated valves comprises a fail-safe actuator mounted on one side of a valve body and a manual override actuator mounted on an opposite side of said valve body (fig 3).

As concerns claim 6, Edwards shows a first of said at least two hydraulically actuated valves comprises a gate valve 70 which comprises a 5 cutter and seal assembly.

As concerns claim 9, Edwards shows a disconnect mechanism comprising a first portion and a second portion, said first portion of said disconnect mechanism being secured to said lower package, said first portion and said second portion of said disconnect mechanism being selectively separable; an emergency disconnect package mountable to said second portion of said disconnect mechanism, said disconnect mechanism comprising at least one hydraulically actuated valve, said emergency disconnect package defining a bore through said at least one hydraulically actuated

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valve but does not show it greater than seven inches. Further, it would have been an obvious matter of design choice to modify the Edwards to include the ranges since routine experimentation would lead one of ordinary skill in the art to these ranges.

As concerns claim 10, Edwards shows at least two hydraulically actuated valves and said at least one hydraulically actuated valve define a bore therethrough but does not show it greater than seven and one-eighth inches. It would have been an obvious matter of design choice to modify the Edwards to include the ranges since routine experimentation would lead one of ordinary skill in the art to these ranges.

As concerns claim 11, Edwards shows said emergency disconnect package is securable to a riser and where said emergency disconnect package is operable to seal a lower end of said riser if said disconnect mechanism is activated to separate said emergency disconnect package from said lower package (fig 1-3).

As concerns claim 12, Edwards shows a first of said at least two hydraulically actuated valves comprises a fail-safe actuator mounted on one side of a valve body and a manual override actuator mounted on an opposite side of said valve body.

As concerns claim 13, Edwards shows a first of said at least two hydraulically actuated valves comprises a gate valve 70 which comprises a cutter and seal assembly.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A. Beach whose telephone number is 571.272.6988. The examiner can normally be reached on Monday-Friday, 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Will can be reached on 571.272.6998. The fax phone number for the organization where this application or proceeding is assigned is 571.273.8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thomas A. Beach

September 17, 2007

**THOMAS A. BEACH**  
Primary Examiner  
Group 3600